

## REMARKS

Claims 1-8, 10-19, and 21-23 are pending in the present application. These claims have been rejected. By this amendment, claims 1 and 17 have been amended as set forth above. It is respectfully submitted that the pending claims define allowable subject matter.

Claims 1-6, 8, 10-17, 19, and 21-23 were rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,315,723 ("Robinson"). Claims 7 and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of United States Patent No. 5,873,830 ("Hossack"). The Applicants respectfully traverse the rejections for the reasons set forth below.

Initially, the Applicants respectfully submit that the finality of the current office action is premature. The Manual of Patent Examining Procedure (MPEP) states the following:

A second or any subsequent action on the merits in any application or patent involved in reexamination proceedings should not be made final if it includes a rejection, on prior art not of record, of any claim amended to include limitations which should have reasonably been expected to be claimed.

MPEP at 706.07(a). The new grounds of rejection in the present application include prior art not of record at the time of the previous office action. That is, Robinson and Hossack were only made of record in the most recent office action. Further, the Examiner should have reasonably expected the Applicants to amend the claims as indicated in the last amendment. That is, the present claims should have reasonably been expected to be claimed due to the fact that they represent what was claimed before the amendment.

For example, the Applicants amended claim 1, in the previous amendment, to include the limitation “multiplying said first and second echoes with at least one weighting factor to form first and second weighted echoes; and summing said first and second weighted echoes....” At that time, the Applicants also cancelled claim 9, which recited “multiplying said first and second echoes with at least one weighting factor to form first and second weighted echoes; and summing said first and second weighted echoes.” In effect, claims 9 and 20 were re-written in independent form, while independent claims 13, 14, and 16 were not amended at all. Thus, the Applicants fail to see how the amendment of claims 1 and 17, which did not involve any material different from the claims as originally filed, necessitated the new ground of rejection. As such, the Applicants respectfully request reconsideration of the finality of the current rejection.

The Applicants now turn to the rejection of claims 1-6, 8, 10-17, 19, and 21-23 under 35 U.S.C. 102(e) as being anticipated by Robinson. Robinson “relates to ultrasonic diagnostic imaging systems and, in particular, to ultrasonic diagnostic imaging systems which synthesize transmit focal zones.” Robinson at column 1, lines 5-7. In particular, “[W]eighted echo samples are... coherently combined by a summing circuit 119 to form a coherent scanline with the extended focal properties of a synthetic transmit focused scanline.” However, Robinson does not teach, nor suggest, “combining said first and second echoes *along said entire scan line* to form a composite scan line in an ultrasound image,” as recited, for example, in claim 13 of the present application; nor does Robinson teach or suggest, “combining said first and second weighted echoes *along said entire scan line* to form a composite scan line in an ultrasound image,” as recited, for example, in claim 1 of the present application.

In fact, Robinson only combines portions of scanlines, but not the entire scan line.

Robinson states the following:

There are several aspects of the present invention which make possible such improvement. One is that the two scanlines are not simply butt-fit segments or segments cross-faded at the zone boundary as in the prior art. Instead echoes over a substantial *portion* of the scanlines are processed and combined. Preferably echoes are combined over *at least half of the distance* (depth) from one focal point to the next. The characteristic shown in FIG. 5 results from the processing and combining of echo signals over the full distance *from focal point 72 to focal point 74*.

*Id.* at column 4, line 59 to column 5, line 1 (emphasis added). Robinson clearly does not combine echoes along the entire scan line because Robinson explicitly states that it only combines over a substantial “portion” of the scanlines. Portion is defined, inter alia, as “an often limited part set off or abstracted from a whole.” See Webster’s Collegiate Dictionary, 10<sup>th</sup> Edition. By definition, a “portion” is not the “whole.”

Even clearer than the passage above, Robinson states the following:

A preferred embodiment of the present invention, as discussed above, combines scanline *segments* which spatially overlap for an appreciable range, generally at least half the distance between focal points and preferably for the full distance between focal points as illustrated in FIG. 5, 6a and 6b.

*Id.* at column 8, line 63 to column 9, line 1 (emphasis added). As shown above, Robinson clearly combines only scanline segments, but not entire scanlines. The distance

between focal points is *not* the entire scan line. Robinson does not teach, nor suggest, "combining said first and second echoes along said entire scan line to form a composite scan line in an ultrasound image," as recited, for example, in claim 13 of the present application; nor does Robinson teach or suggest, "combining said first and second weighted echoes along said entire scan line to form a composite scan line in an ultrasound image," as recited, for example, in claim 1 of the present application. Thus, for at least this reason, Robinson does not anticipate claims of the present application.

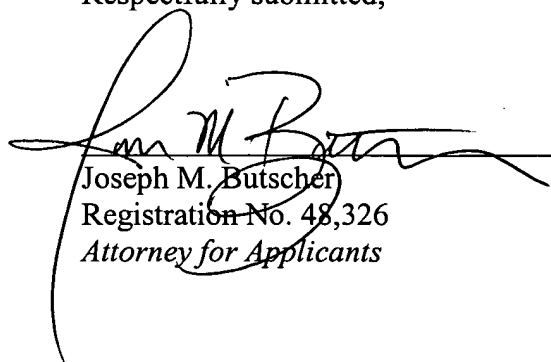
The Applicants now turn to the rejection of claims 7 and 18 were under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Hossack. The Applicants respectfully submit that the combination of Robinson and Hossack does not render claims 7 and 18 of the present application unpatentable at least for the reasons discussed above.

In light of the above, the Applicants request reconsideration of the rejections of the pending claims of the present application and look forward to working with the Examiner to resolve any remaining issues in the application. If the Examiner has any questions or the Applicants can be of any assistance, the Examiner is invited to contact the Applicants. The Commissioner is authorized to charge any necessary fees or credit any overpayment to USPTO Account No. 07-0845.

Respectfully submitted,

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